

Lidar Fact Sheet: Victoria County, Texas

Overview

The Victoria County data set was received from the Texas Water Development Board (TWDB). It was reviewed by the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center at the macro level, which involves checking for format and point characteristics for approximately 5% of the tiles. In addition, the entire data set is reviewed to establish that bare-earth processing and proper classification of the points has been performed. The review does not include accuracy or data-processing (e.g. bare earth quality, flightline mismatch, feature removal) assessments.

Data Attributes

The Texas county data were delivered as bare-earth processed data sets. However, no accuracy or qualitative assessment information was provided. The data acquisition occurred in 2006, and the data were processed to meet Federal Emergency Management Agency (FEMA) flood mapping standards (root mean square error of 18.5 centimeters in open, bare terrain). Point spacing is nominally on the order of 1.4 meters. For full metadata, follow this link:

www.csc.noaa.gov/crs/tcm/ldartdat/metatemplate/tx2006_victoria_template.html

Review Results

According to the limited review, the data set on average appears to be of fair quality. This determination is based on the issues listed under the reviews below. Again, no accuracy assessment was performed.

Tile Review

Some minor format issues. The issues identified in this review are as follows:

1. Ground classified points were in some cases listed as return one of two returns.
2. Some/many flightlines have no first returns (only 2 of 2) but have bare earth.
3. Many files have only first returns.
4. No flightline source information.

Although these are directly related to bare-earth quality, the issues above (1, 2, and 3) raise questions regarding the data processing.

Bare Earth Point Density Review

Figure 1 below depicts the bare-earth point density per 2,500 square meter cell and per square meter. The issues determined in this review are as follows:

1. There are noticeable point density deficiency “strips” in the middle of the county. This may be a sensor issue.
2. The northern portion of the county appears to have collected well.
3. The southern portion has some specific “flightline” point density (classification) variance.

For More Information

NOAA Coastal Services Center
Coastal Remote Sensing Program
(843) 740-1200 • www.csc.noaa.gov/crs/





Figure 1. Bare-earth point count density (pts/2500 square meters) in Victoria County.